CATALOGUE...

OF THE

Klein School of Optics

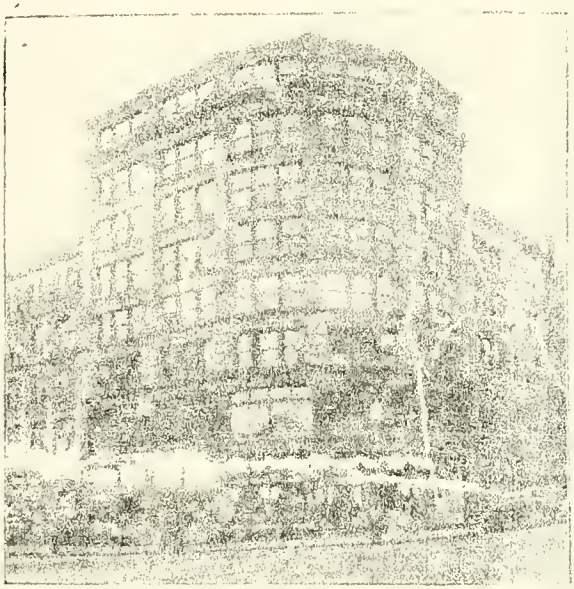
185 SUMMER STREET

BOSTON, MASS.

CATALOGUE...

OF THE

Klein School of Optics



185 SUMMER STREET

BOSTON, MASS.

Digitized by the Internet Archive
in 2011 with funding from
Massachusetts Board of Library Commissioners and the Institute of Museum and Library Services

http://www.archive.org/details/catalogueofklein1900klei

KLEIN SCHOOL OF OPTICS

THE KLEIN SCHOOL OF OPTICS was established in 1895. Among its first instructors were men well identified with the Optical business, who from their close association with the Opticians, were in a position to know what was most needed for an ideal Optical School. These gentlemen took up the cause of the school with great enthusiasm and helped it along with lectures, and otherwise, so that the school attained a world-wide reputation in a short time. Up to that time there was no Optical School in existence, where the technical part of the profession was taught. Instructors on Surface Grinding were supplied by the Globe Optical Company. The instructor for the manufacture of frames came from the American Optical Company. Mr. Barber and Mr. Wells; both of the Globe Optical Company, gave lectures on Optical Instruments and Framework. The best of instructors on Algebra, Geometry and Trigonometry were obtained; the latest machinery and optical instruments were secured and every new appliance was tested before the students to secure them from purchasing useless instruments. It was the endeavor of the promoters to give to the name "Optician" once more its scientific meaning to bring up the standard of the Optician, so that it could well be classed as one of the noble professions. The title "Graduate Optician" could well compare with that of the Pharmacists or other professions.

The instructions offered at the school were in fact superior to the instructions offered by other professions. The Directors of the School never permitted their students to sail under false colors, and so far none has called himself other than by that ancient and well honored title "Optician." How well the School was respected by the

medical and other professions is shown by the number of physicians who patronize and encourage it. Ministers, lawyers and teachers have patronized it, often only for the scientific knowledge to be gained, without practising in the profession. The sign "Optician" appears now on elegant office buildings and private residences. The Optician is looked upon again as an accomplished educated person, who in learning can well be placed among other scientific professions. The object for which the school was started has been well attained. While other Optical Schools have tried all kinds of titles for their graduates, The Klein School of Optics is proud to retain on its Diplomas the title—"Optician."

An Optician has an elegant, delicate, scientific profession, his patrons are mostly ladies, he has less drudgery to do than the physician, he does less worrying than the lawyer, and is more independent than the minister, and one of his greatest advantages is, that his profession is not overcrowded. There are good chances for all scientific Opticians.

Klein School of Optics,

BOSTON, MASS.

DIRECTOR: AUGUST A. KLEIN, M. D.

The winter courses begin October first at the school, 185 Summer Street. The location is one of the most accessable in Boston, being convenient to all railroads, surface and elevated cars. The building is one of the modern palaces of which Boston is so proud.

The Mechanical Department is located at 410 Washington Street, in the heart of the Optical trade. The rooms are fitted up in the latest style with all modern machinery and Optical Appliances.

The preparatory courses for physicians are discontinued, all studies not absolutely needed for an Optician. have been eliminated. The Courses are shortened to ten weeks. Three courses are given through the Winter and Spring. Summer Courses are charged double.

FEES A full course of ten weeks, Seventy-five Dollars. Without Mechanical Optics, Fifty Dollars. Special Course of one month, Thirty-five Dollars. Single instruction on any branch, Five Dollars. Summer course from July to October, One Hundred Dollars. All Fees payable in advance.

DIPLOMAS Students who receive 70 per cent. in all branches receive a diploma. Students who take short courses and who do not pass the examination will receive a certificate for the time they have attended. Students who take Special Courses receive a Special Diploma. Students who take full Summer Course receive Diploma and Special Mention as assistants to Dr. Klein.

ADMISSION Any person having a common school education and is of good moral character will be admitted. Any deficiency in education can be rectified during attendance. A recommendation from some reputable person is required. Students who desire to prolong their studies are permitted to do so by paying a small additional fee for covering necessary outlays.

HOURS Students are expected to be present from 9 A.M. to 5 P.M. Not all this time is taken up by lectures and quizzes, so that ample time is provided for study and practice. Evening classes will be arranged at request.

BOOKS Gray's Anatomy, Foster's Physiology, Brockway on Physics, De Schweinitz on the Eye, Haab's Atlas of Ophthalmoscopy, Prentice on Ophthalmic Lenses.

INSTRUMENTS A small disecting case, an Ophthalmoscope, Retinoscope. Test cases can be hired from wholesale house at small cost.

TOOLS A complete set of tools for the mechanical department at a cost of about Eight Dollars may be be obtained from the Globe Optical Company or the Boston Optical Company, or any supply store.

Instruction is done by practical work at the bench, by practical work in the office with the Test Case and Optical Instruments, by lectures, recitations and quizzes.

Subjects for Study: Anatomy, Physiology, Physics, Ophthalmology, Mechanical Optics.

Anatomy: Osteology of skull, structure of orbits, Tennon's capsule, muscles, nerves, arteries, lymphatics, veins of the eye and orbit, the eyeball, its layers and refractive media, the optic nerve, and the brain.

Physics: Theories of light, Sources of light, Velocity of light. Photometers. Laws of Reflection. Mirrors. Kinds and uses of Mirrors. Real and virtual Images. Laws of Refraction. Index of refraction of transparent substances, Dioptric System. Single and double refraction. Formation of foci and images by lenses. Chromatic and spherical aberation. Optical instruments. Spectroscope.

Physiology: Visual impulses and perception of light. Function of refractive media, retina optic nerve, chiasma, optic tract, corpora quadrigemina, corpora geniculata, pulvinar, cuneus. Visual and Anatomical areas. Corresponding parts in retina. Projection of field of vision and field of sight. Visual line. Optic Axis. Visual angle. Angle alpha. Cardinal points. Radius of curvature of cornea and lens. Index of refraction of cornea aqueous, lens and vitreous humor Coordination, Accommodation, Convergence, Horopter Function of Iris, Afferent and Efferent tracts, Function of Ciliary muscle. The eye as an optical instrument.

Ophthalmology: Use of Test case, prisms and Optical instruments. Errors of refraction, Presbyopia, Heterophoria, Strabismus, Asthenopia Paralysis of ocular muscles. Paralysis of Accommodation. Spasm of Accommodation. Examinations and correction of patients with lenses and prisms. Retinoscopy, Opthalmoscopy. Use of Perimeter, Phorometer and other optical appliances. Mydriatics. Diseases of the Eye. Relation of Optician to Physician. Medical Laws of different states.

Mechanical Optics: Measuring frames to face: Pupillary distance, inset, outset, height and width of bridge, length of temples, size of eye. Centering lenses, cutting lenses to axis, edge grinding, drilling holes in lenses, verifying cylinders and compounds. Parts of frames, nomenclature of wholesale houses, pricelist. Setting up spectacles and eye glasses, making frames, soldering, repairing, transposition of lenses.

Board and rooms may be obtained at low prices. Excellent restaurants are in close proximity of the school. On account of easy access to all railroads and surface cars, rooms may be obtained in outlying districts at very low prices.

For further information, address,

KLEIN SCHOOL OF OPTICS,
185 SUMMER St. cor. Atlantic Ave.
BOSTON, MASS.

GRADUATES AND STUDENTS

Alexander, F.	Boston, Mass.	1898
Allen, M. E.	Port Elgin, N. B.	1897
Adams, Mrs. H. E.	Sanford, Florida	1898
Alexander, M. Harvie	Boston, Mass.	1899
Bullard, W. P.	Boston, Mass.	1897
Barron, George A.	Boston, Mass.	1897
Barnes, J. B.	Louisville, Kentuckey	1897
Bennett, C. H.	Malden, Mass.	1897
Briggs, Mrs. Elizabeth	Brandon, Vt.	1897
Baker, Frank L.	South Yarmouth, Mass.	1898
Badgley, Cleo H.	Schoharie, N. Y.	1898
Bowles, Eugene Franklin	Boston, Mass.	1898
Bernhard, Andrew A.	New York, N. Y.	1899
Bliss, Franklin H.	St. Paul, Minn.	1899
Boyd, Arthur L.	Northfield, Mass.	1899
Bullard, Raymond A.	Spencer, Mass.	1900
Bowen, Arthur H., M. D.	Rochester, N. Y.	1901
Beane, George F.	Olneyville, R. I.	1901
Buckman, Charles H.	Boston, Mass.	1901
Barrs, Carrington E.	Jacksonville, Florida	1901
Bronson, Fred C.	Westfield, Mass.	1902
Bent, R. F.	Halifax, N. S.	1899
Booth, A. F., M. D.	Boston, Mass.	1895
Bugbee, C.	Southbridge, Mass.	1897
Connelly, A. F., Ph. G.	Boston, Mass.	1895
Corbin, E. D.	North Brookfield, Mass.	1899
Cook, Mary Canfield	Muskegan, Michigan	1896
Cook, W. W.	Natick, Mass.	1899

Churchill, Arthur J.	Southington, Conn.	1901
Christensen, Fred	Lowell, Mass.	1901
Collins, Charles J.	Boston, Mass.	1902
Cashman, James F.	Newburyport, Mass.	1902
Caswell, Esther L.	Lowell, Mass.	1903
Derby, Fred W.	Arlington, Mass.	1897
Doescher, R. R.	Arkansas	1897
Doyle, Grace A.	Revere, Mass.	1899
Dix, Harry L.	Holly Springs, Miss.	1899
Davis, Minot F., M. D.	West Medford, Mass.	1901
Donavan, Benedict, M. D	Brockton, Mass.	1902
Elias, Abraham	Syracuse, N. Y.	1901
Eastman, Sylvester	Providence, R. I.	1896
Englunt, Albert W.	New Bedford, Mass.	1901
Etz, Edwin H.	Washington, D. C.	1898
Evans, Burlin E.	Malden, Mass.	1896
Field, Phencas P., M. D.	Boston, Mass.	1896
Foster, Mrs. I.	Waltham, Mass.	1897
Free, Albert J.	Harrisburg, Pa.	1899
Gray, F.	Southbridge, Mass.	1896
Gingras, Joseph H.	Laconia, N. H.	1897
Gage, G. F.	Dover, N. H.	1897
Goldbacher, Edward	New York, N. Y.	1897
Gohl, Harry E.	Harrisburg, Pa.	1899
Gardner, Harry L.	Lowell, Mass.	1901
Hahn, J. C.	Brooklyn, N. Y.	1897
Hahn, Theresa	Brooklyn, N. Y.	1897
Hahn, Anna	Brooklyn, N. Y.	1897
Hadley, C. F.	Auburndale, Mass.	1897
Hart, A. A.	Marlboro, Mass.	1897
Howard, Arthur B.	Ware, Mass.	1897
Hood, Stanley	Yarmouth, N. S.	1897
Holmberg, Gustave E.	Peekskill, N. Y.	1898
Holsten, Herman K.	Waltham, Mass.	1899
Heckler, Josiah P.	Mainland, Pa.	1899
Hubbard, Charles J.	Ludlow, Vermont	1900
Horn, S. C.	Jefferson, Maine	1901
Hanson, F. E.	Portland, Maine	1901
Howe, Hollis S.	Concord, Mass.	1901
Hermant, Percy	St. John, N. B.	1901
Higgins, Victor	Bar Harbor, Maine	1902
Harris, Howard M.	Margeretville, N. S.	1902
Ives, B. F.	Boston, Mass.	1898

Jakobson, S.	East Boston, Mass.	1896
Jones, C. P.	Northfield, Vermont	1897
Johnson, D., M. D.	Northfield, Vermont	1897
Klein, Herman L.	Boston, Mass.	1896
Kraus, James, M. D.	Malden, Mass.	1896
Kull, Frederick	St. Albans, Vt.	1899
Lawton, J. S.	Brockton, Mass.	1896
Lee, A. E.	Holyoke, Mass.	1896
Lonergan, Thomas	Providence, R. I.	1897
Landry, J.	Boston, Mass.	1897
Lunt, Lawrence W.	Milton, Mass.	1897
Larcher, R. T.	Webster, Mass.	1897
Leavitt, Earnest S.	Somerville, Mass.	1897
Lundstrom, John P.	Boston, Mass.	1898
Locke, Harvey B.	Amesbury, Mass.	1899
Leonard, Nathaniel	Charlestown, Mass.	1899
Lappin, Peter L.	Portland, Maine.	1899
Laughlin,	N. B.	1901
MacEvoy, William	Boston Optical Co. Mass.	1896
Martin, Franklin	Boston, Mass.	1897
Montgomery, Hugh	Boston, Mass	1897
Margot, F. G.	Jamaica Plain, Mass.	1897
McPhillips, Charles B.	Providence, R. I.	1897
Marshea, Florence M.	Cambridge, Mass.	1897
MacDonald, Angus	Torrington, Conn.	1897
Maguire, J. F.	Boston, Mass.	1897
McEvoy, John	Boston, Mass.	1897
Marqusee, Harris	Syracuse, N. Y.	1898
Marqusee, Morris	Syracuse, N. Y.	1897
Meyers, U. P.	Derry Depot, N. H.	1898
Macmaster, Anna E.	Cambridge, Mass.	1899
Mayer, Theodor W.	Buffalo, N. Y.	1899
Martin, Newton R.	Springfield, Ohio	1900
Moody, H. A.	Jefferson, Maine	1901
Morrison, Chas. C., M. D.,	Bar Harbor, Maine	1901
Norcross, O. S.	Waltham, Mass.	1896
Norton, Carrie Bertha	Chicago, Ill.	1897
Noyes, J. R.	Newburyport, Maine	1899
Nystrom, A. W.	Boston, Mass.	1900
Palmer, Briggs S.	Boston, Mass.	1897
Park, F. M.	So. Chelmsford, Mass.	1897
Pool, Frederick E.	Rockwood, Mass.	1898
Pratt, H. E.	Pomania, California	1898

Pollard, Henry J.	New Braintree, Mass.	1899
Peabody, Rufus	Haverhill, Mass.	1889
Parker, Nellie M.	Somerville, Mass.	1899
Perkins, David F. M.	Quinelle, B. C.	1899
Pike, H. L.	Westbrook, Maine	1903
Pilling, Simon, M. D.	Newburyport, Mass.	1901
Poor, Elbin L.	Heding, N. H.	1901
Quinn, George	Boston, Mass,	1901
Rose, M. Milton	Cambridge, Mass.	1896
Ralph, Addington D.	North East Harbor, Me.	1898
Rubin, Arthur	Boston, Mass.	1901
Smith, G. E. B. A.	Lynn, Mass.	1896
Stone, O. H.	Pittsfield, N. H.	1896
Schweizer, Charles	Mobile, Ala.	1896
Smith, A. K.	Boston, Mass.	1897
Story, Frank	Hillsboro Bridge, N. H.	1897
Sanborn, J. W.	Boston, Mass.	1897
Shephard, M. E.	Malden, Mass.	1897
Stone, Fred. W.	Attleboro, Mass.	1898
Seabury, E.	Boston, Mass.	1897
Sparks, Sylvester T.	Lowell, Mass.	1898
Shultz, H. L.	Springfield, Ill.	1903
Schweizer, Adolph	Selma, Ala.	1898
Smith, George W.	Dorchester, Mass.	1898
Swain, W. G.	New Britain, Conn.	1898
Small, Irwin R.	Boston, Mass.	1898
Sparling, John H., M. D.	Fitchburg, Mass.	1898
Sparling, Maude J.	Fitchburg, Mass.	1898
Sampson, Jacob	Dorchester, Mass.	1899
Smith, Charles J.	St. Albans, Vt.	1899
Schweizer, Emil	Selma, Ala.	1898
Seaman, Robert A.	Boston, Mass.	1899
Selby, Erastus C.	Youngstown, Ohio	1899
Sellers, Horace Bronner	Wilmington, Del.	1901
Smith, Benjamin V	Albany, N. Y.	1900
Tucker, Charles D.	Medford, Mass.	1896
Thomas, W. L.	Boston, Mass.	1897
Taft, J. W.	Campello, Mass.	1897
Tilton, S.	Reading, Mass.	1897
Triller, Wesley R.	Poughkepsey, N. Y.	1899
Thomas, Clinton F.	Southbridge, Mass.	1899
Underwood, Leslie A.	Boston, Mass,	1897
Van Alstine, C. P.	Boston, Mass.	1898
West, Alfred G.	Waterbury, Conn.	1896
Weiss, W. F.	Montgomery, Ala.	1898
Wald, F.	Southbridge, Mass.	1899
Wood, Charles H.	Oakland, Calif.	1899
White, A.	Lowell, Mass.	1901
Walker, Fred A.	Bradford, Vt.	1901
Whitcomb, H. J.	Lancaster, N. H.	1901
Williston, Robert C.	Lowell, Mass.	1901
Woodbury, Fred H.	Pittsfield, N. H	1899